



National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Coastal Protection and Restoration Division

NOAA CPRD Program Waste Site Fact Sheet

Site Name: United Heckathorn

Site Location: Richmond, California

Congressional District: CA-37

EPA Region: 9

Site Description: The United Heckathorn site has been a major source of DDT to San Francisco Bay since the mid 1940s, when a pesticide blending and packaging plant began operations. Although the pesticide blending and packaging operations ended in the early 1960's, DDT accumulations in mussels near the site remain amongst the highest detected in the California Mussel Watch program. The site is located on the eastern shoreline of the central bay in the city of Richmond, and includes Lauritzen Channel, Parr Canal, the Santa Fe Channel, and Richmond Inner Harbor. Sediments in the channels and harbor, and soils around the facility, are contaminated with DDT, dieldrin, and other persistent chlorinated pesticides. NOAA trust resources at the site include a large variety of estuarine aquatic species, and the site provides foraging, nursery and spawning habitat. Pacific herring, Dungeness crab, and starry flounder are among the most common species in the area. Contamination at the site has spread throughout San Francisco Bay, but the most dramatic evidence for injury was noted in the channels near the facility: the sediments from the site are toxic to benthic invertebrates that serve as food for fish and birds in the area, the benthic community has been altered by the contamination, and DDT has accumulated in fish near the site to concentrations that are known to inhibit normal reproduction in the fish and in birds that consume them. The very high concentrations of DDT and dieldrin at the site have also precipitated fish advisories in the area, affecting recreational fishing. Because of the observed adverse effects, EPA developed a protective cleanup plan that includes removing all accumulated sediments from two inlets down to an ancient layer of harder sediment. The remedy includes provisions for replacing the dredged sediment with one foot of clean sand to enhance recovery of the benthic community. Monitoring will be conducted to ensure that the remedy is meeting the goal of protection for aquatic species.

NOAA Activities to Date: NOAA provided technical support to EPA during all phases of the remedial process, providing recommendations for sampling and analysis, detailed comments to improve the analysis of ecological risk, and specific recommendations for the design of the remedy. For example, NOAA provided EPA with recommendations for the appropriate season to dredge in order to prevent effects to spawning herring. NOAA recommended the placement of clean sediment over the dredged area to enhance recovery of a healthy benthic community. NOAA is also working with EPA to develop a remedial effectiveness monitoring program. A 5-year review for the site is expected in 2001.

Restoration Status: To address past injury to trust resources, NOAA and the other trustees successfully negotiated a settlement with the responsible parties. The settlement provides funds to enhance and restore wetlands in a wildlife refuge in San Pablo Bay. The restoration will be conducted by the US Fish and Wildlife Service and will convert more than 70 acres of diked, abandoned hay field to a combination of tidal marsh and sloughs, providing habitat for estuarine fish and invertebrates, birds, and small mammals. The sloughs that will be created in the new wetlands will provide nursery and forage area, as well as predator refuge for NOAA species. This is particularly important for juvenile salmon as they migrate from the Sacramento River out the Golden Gate. One of the problems for the salmon as they migrate is the urbanization of the north shoreline in the Bay, and the resulting lack of feeding and resting

Contacts: Dr. Alyce Fritz/Dr. Mary Matta
CPR Division, Seattle WA
206/526-6938

Laurie Sullivan
NOAA CRC, San Francisco, CA
415/744-3126

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areas. The advantage of choosing to restore areas of San Pablo Bay was to provide valuable contiguous wetland habitat rather than fragmented habitat.

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